

nately with rings of red and white, of which there are 29 of the former color, and 32 of the latter, without counting that on the head.

The difference in number between the red and white rings arises from the fact that the red rings die out upon the hinder part of the tail, which has white rings only.

The red rings in many cases do not cross the back, but are divided by the junction of a pair of black rings. The black rings become wider on the centre of the back, approaching, and in most cases, joining each other in pairs, but always at the expense of the red rings, the white rings being invariably continuous with the white of the abdomen. There are traces of red on parts of the abdomen, and the black rings can generally be partially traced across the abdominal scutellæ.

The specimen in this collection has six upper labials on one side, and seven on the other, the sixth and largest on the left side, being represented by two shorter plates on the right side.

Length of body, 13 inches; of tail, 2 inches.

Abdominal scutellæ, 198; sub-caudal, 45; dorsal rows of scales, 23.

Locality, Northern California. Presented and collected by Paymaster Stanton, U. S. N.

In Baird & Girard's catalogue, p. 153, Blainville's description of *Coluber zonatus*, of which those authors had seen no specimens, is given, and appears to agree in most particulars with the species here described, but the nostrils are hollowed out of the anterior nasal, and the color is different. Blainville describes his specimen as "Reddish white, entirely annulated with deep black, with two half rings of the same color on the head." It is very probably the same species, and for this reason I have preserved his specific name of *zonatus*, but the entire last abdominal scutella, want of carination of dorsal scales, and smaller number of abdominal scutellæ, appear to me to necessitate the formation of a new genus.

W. G. W. Harford read a paper describing a new genus and three new species of Sessile Eyed Crustacea.

### Description of a New Genus and three New Species of Sessile Eyed Crustacea.

BY W. G. W. HARFORD.

*Lockingtonia*. n. g.

Antennæ *not* appendiculate. First three segments of the pleon dorsally carinated, and posteriorly produced to an acute point. Three posterior segments of the pleon *not* furnished with fasciuli of spines on dorsal surface. Eyes, round. Telson, single. Habitat, fresh water.

The above genus agrees with *Dexamine* and *Atylus* in its non-appendiculate antennæ. It differs, however, from the former in having the first pair of gnathopoda chelate, three instead of four anterior segments of the pleon dorso-posteriorly produced to a sharp point, and from the latter in the man-

dibles wanting the palpiform appendage. It is removed from Gammarus proper by having no fasciculi of spines on dorsal surface, no appendage to the antennæ, and a single telson. This is a very common Amphipod in nearly all our lakes and small streams, and it is somewhat remarkable that it has until now escaped detection. It occurs in great numbers in Lobos Creek, where our specimens were obtained; also in the streams of Alameda County, and I doubt not, may be found in any of the permanent fresh water ponds or streams along our Coast for a considerable distance north and south of here.

It is with pleasure that I dedicate this genus to Mr. W. N. Lockington, whose ability and industry has accomplished so much towards an orderly arrangement of the Crustacea in our Museum, thus giving us an invaluable cabinet of reference for those who desire to pursue investigations in this interesting department of zoölogy.

*Lockingtonia fluvialis.* n. s.

Superior and inferior antennæ setose. Superior a little more than half the length of the inferior antennæ, and much longer than their base. Terminal joint of inferior antennæ longer than the preceding; flagella twelve jointed. Flagella of superior antennæ ten jointed. Caudal stylets and legs setose; the latter especially so at the joints. Hand oblong-ovate, palm setose, oblique. Carpus produced posteriorly along the proximal side of the manus.

Hand of first pair of gnathopoda chelate.

Length,  $\frac{5}{8}$  inch.

*Alloniscus maculosus.* n. s.

Cephalon slightly transverse, rounded in front. Outer joint of inner antennæ sub-clavate, with four spines on its summit. Outer antennæ spinulose at the joints. Flagellum multiarticulate, setose at joints. Last joint of outer antennæ about one-third longer than the preceding. First segment of the pereion longer than the 2d, 3d, 4th or 5th. The 6th and 7th shortest. The lateral margins of the first two segments of the pleon concealed under the seventh of the pereion. Color light brown above, with yellowish brown spots, becoming darker in alcohol.

Length,  $\frac{7}{8}$  inch.

This is doubtless identical with some specimens of this genus which Prof. Dana had before him while describing his *Alloniscus perconvexus*, and which he says may probably be another species, Proc. Phil. Acad. 1854, p. 176. It is very near *A. perconvexus*, but may be readily distinguished from it by its light brown color above, with yellowish spots, and its still lighter colored limbs, which are minutely spotted with reddish brown, and its more slender form.

We found our specimens on Angel Island among fern roots, *Woodwardia radicans*, early in March last. A few only obtained.

*Asellus Tomalensis.* n. s.

Head a little transverse, narrower than the body. Upper antenna not reaching to the extremity of the peduncle of the lower. Flagellum of lower

antennae longer than its peduncle. Body narrow in front, gradually increasing in width towards the tail.

Peduncle of caudal appendages more than half the length of the terminal filaments.

Length,  $\frac{6}{25}$  inch.

This interesting little Isopod was recently obtained by Mr. W. N. Lockington while collecting at Tomales Bay and vicinity, and is, so far as I am aware, the first example of the genus found on this Coast. In that excellent work, "British Sessile Eyed Crustacea" (Bates & Westwood), two species are accredited to N. A., but we find no mention of them by any American author we have applied to, and it is most probable that they were from the eastern part of the continent. We therefore venture to offer this as new. A single specimen only was found, although several casts of the net were made. It would seem, therefore, very uncommon in that locality. We hope, however, that by diligently searching the fresh water ponds and streams along our Coast it may be found in greater numbers, with, possibly, other species of the genus. I hope that collectors will carefully examine our fresh waters for this Crustacean, thereby enhancing the value of our cabinet, and aiding students in acquiring a knowledge of these very interesting little creatures.

W. N. Lockington read the following description of a new genus and species of Decapod Crustacean and the male of *Phyllodurus abdominalis*:

### Description of a New Genus and Species of Decapod Crustacean.

BY W. N. LOCKINGTON.

Family PINNOTHERIDÆ.

*Tubicola*. nov. gen.

Carapace extremely broad; fourth pair of legs much elongated, fifth pair rudimentary.

Habitat, the inside of the tube of an annelid.

*Tubicola longipes*. nov. sp.

Carapace broad, transverse, more than twice as wide as long; front occupying about one-third of the width of the carapace; antero-lateral margins broadly rounded; postero-lateral somewhat concave, the two meeting at an acute angle in the middle of the side of the body; posterior margin straight.

Branchial regions largely developed, tumid; a long transverse depression in the carapace behind the gastric region; antero-lateral margin bordered by a fringe of setae.

Third joint of external maxillipeds very small; second joint stout and large.

First pair of legs short, with short carpus and flattened elongated manus having a fringe of setae on its upper border.